

CLAIMS

1. An information reproduction device, characterized in that it comprises:

a frequency difference detection means which detects a difference in frequencies between a read clock, obtained by applying PLL to a reproduction signal read from a recording medium, and a reference clock;

an information processing means which performs signal processing on the reproduction signal and outputs a processing status information indicating whether or not the information processing is performed normally; and

a frequency monitoring means which monitors whether or not the frequency of the read clock is normal based on the frequency difference and the processing status information;

wherein the frequency monitoring means makes a transition to an OK status indicating that the frequency of the read clock is normal when the processing status information is indicating a normal status; and

makes a transition to a NG status indicating that the frequency of the read clock is abnormal when the processing status information is indicating an abnormal status and the difference of the frequencies exceeds a first threshold; and

returns to an OK status when the difference of the frequencies is below a second threshold during the NG status.

2. The information reproduction device according to claim 1, characterized in that:

the frequency difference detection means outputs the difference between the number of pulses per a predetermined reference time period of the read clock and the reference clock as the frequency difference; and

the frequency monitoring means makes a transition to the NG status when a cumulative value of the difference of the number of pulses during a plurality of reference time periods exceeds a first threshold, and returns to the OK status when the difference of the number of pulses during a single reference time period is lower than a second threshold during the NG status.

3. A read clock monitoring method, characterized in that it comprises:

a frequency difference detection step which detects a difference in frequencies between a read clock, obtained by applying PLL to a reproduction signal read from a recording medium, and a reference clock;

an information processing step which performs signal processing on the reproduction signal and outputs a processing status information indicating whether or not the information processing is performed normally; and

a frequency monitoring step which monitors whether or not the frequency of the read clock is normal based on the frequency difference and the processing status information;

wherein the frequency monitoring step makes a transition to an OK status indicating that the frequency of the read clock is normal when the processing status information is indicating a normal status; and

makes a transition to a NG status indicating that the frequency of the read clock is abnormal when the processing status information is indicating an abnormal status and the difference of the frequencies exceeds a first threshold; and

returns to an OK status when the difference of the frequencies is below a second threshold during the NG status.

4. The read clock monitoring method according to claim 3, characterized in that:

the frequency difference detection means outputs the difference between the number of pulses per a predetermined reference time period of the read clock and the reference clock as the frequency difference; and

the frequency monitoring means makes a transition to the NG status when a cumulative value of the difference of the number of pulses during a plurality of reference time periods exceeds a first threshold, and returns to the OK status when the difference

of the number of pulses during a single reference time period is lower than a second threshold during the NG status.